MTX AUDIO

THUNDER® AXE® HIGH-END COMPONENTS

OWNER'S MANUAL

TXC6.1, TXC5.1, TXC4.1

MTX BIGGEST BADDEST BOLDEST SOUND

MTX.COM

MTX AUDIO

MTX002049 TXC Owners Manual.indd 1 4/6/05 3:30:41 PM

INTRODUCTION

Thank you for choosing MTX to help reach your ultimate goal with your vehicle. Adding MTX TXC High-end Component speakers and a matching MTX amplifier with StreetWires connections will put you in a better position to hear, feel, and experience all of the music the artist intended.

TXC series component speakers are the best in the MTX offering of full-range speakers. They offer many added features that are designed for the distinguished listener. Five levels of tweeter attenuation, three positions of Off-axis adjustments, and Bi-amp inputs are just some of the features that will help reproduce the music with exceptional dynamics and detail regardless on mounting location and position within the vehicle. The TXC series also offers an add-on midbass driver and/or tweeter that further define the musical experience. The TXC6.0 is an additional woofer that can change this 2-way system into a true 3-way system, while the TXC.1 is an additional tweeter that adds a new dimension to the imaging. Call 1-800-CALL-MTX for more information.

SPECIFICATIONS

Model	TXC4.1	TXC5.1	TXC6.1	TXC6.0	TXC.1
Description	4" Components	5-1/4" Components	6-1/2" Components	6-1/2" Woofer	25mm Tweeter
Cone	Glass Fiber with Aluminum Deposition	Glass Fiber with Aluminum Deposition	Glass Fiber with Aluminum Deposition	Glass Fiber with Aluminum Deposition	N/A
Tweeter	Teteron Dome	Teteron Dome	Teteron Dome	Teteron Dome	Teteron Dome
Impedance	4 Ohm	4 Ohm	4 Ohm	4 Ohm	4 Ohm
Frequency Response	50Hz-25kHz	45Hz-25kHz	43Hz-25kHz	43Hz-250Hz	3.5kHz-25kHz
Power (RMS)	100	125	150	150	75
Peak Music Power	200	250	300	300	150
Sensitivity @ 2.83V	88dB	90dB	91dB	91dB	91dB
Voice Coil	1.25"	1.5"	1.5"	1.5"	25mm
X-Max	2.5mm	4.8mm	4.8mm	4.8mm	N/A
Woofer Mounting	1-3/4"	2-1/4"	2-1/4"	2-1/4"	N/A
Woofer Cut-out Dia.	3-1/2"	4-1/2"	5-19/32"	5-19/32"	N/A
Tweeter Mounting Depth	1"	1"	1"	N/A	1"
Tweeter Cut-out Dia.	1-7/8"	1-7/8"	1-7/8"	N/A	1-7/8"
Tweeter Mounting Options	Flush, Surface, Angle	Flush, Surface, Angle	Flush, Surface, Angle	N/A	Flush, Surface, Angle
Crossover Adjustable Tweeter Level	0, -1.5, -3, -4.5, -6	0, -1.5, -3, -4.5, -6	0, -1.5, -3, -4.5, -6	N/A	0, -1.5, -3, -4.5, -6
Off-axis Compensation	0, 30, 60 Degree	0, 30, 60 Degree	0, 30, 60 Degree	0, 30, 60 Degree	N/A
Bi-amp Inputs	Yes	Yes	Yes	Yes	N/A

BEFORE STARTING

MTX recommends that you have your new speakers installed by an authorized MTX retailer, preferably MECP certified. If you do decide to do it yourself, make sure you have read the instructions carefully and that you have the following tools:

- Electric drill
- Phillips bit or screwdriver
- 1/8" bit
- Door panel puller
- Wire cutters/crimpers
- Metal cutting tool
- Safety glasses
- 2mm hex wrench
- X-acto knife

Throughout installation, keep in mind the ultimate objective of creating an ideal soundstage and exceptional imaging. This refers to the experience you get when you sit in your seat with your head up and shoulders straight, close your eyes, and listen. Where does the music seem to be coming from? In an ideal world, you would hear all music from front and center, meaning it sounds like a band is performing on your hood. Raising the soundstage is a very important process and every option should be considered in order to have your sound as up and in front as possible.

Removing the Door Panel

Please be aware that today's cars have door panels that are not designed to come apart easily; they are designed by the factory to sit tight against the door and not rattle. It is important to note that if the proper procedures are not followed, the door panels can easily become damaged and make them fit improperly when you're trying to reinstall them.

Use a door panel puller to remove the door panel, and be aware there are often hidden screws that, if overlooked, can cause the panel to crack or break when force is applied to remove door panel. It might be a good idea to do some research on your specific car to be sure they are all removed before continuing. Even new car owner needs to be aware of this potential issue. Buying a new door panel is an expensive process so please take note of the potential for damage.

With the door panel off, it is a perfect time to add sound dampener. The main goal of sound dampeners is to add mass to the metal in the door, causing less rattle and "ring" which will help to improve the overall sound of your new speakers. It also helps prevent against outside noise by adding insulation. Sound dampening material can be purchased from your local retailer and is available in many different forms, and kits, for many different applications. Please make sure you purchase the correct type for your specific project.

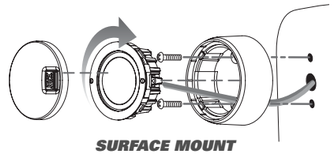
Note: Before cutting anything, please use common sense and make sure that no wires or glass will interfere with cutting tools. ALWAYS WEAR PROPER SAFETY GLASSES. Be sure all wires are clear of moving parts such as window crank mechanisms and trunk hinges. Use rubber grommets when running wires through sharp edged metal holes, which may wear through the wire's insulation.

Do not mount speakers where they could come in contact with:

- The door's window glass
- The window crank handle or gear assembly when rotated
- The trunk springs, shock towers, or trunk lid
- The gas tank or fuel lines

TWEETER MOUNTING

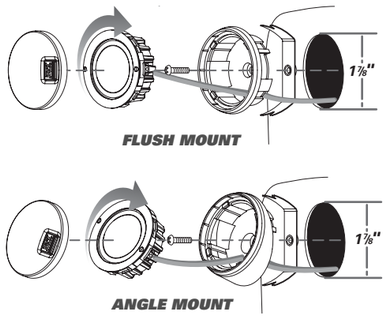
When positioning the tweeter for the best imaging, aim the passenger side tweeter toward where the driver's head will be. The same process should also be completed on the driver's side tweeter but this time you'll aim the tweeter toward where the passenger's head will be. Positioning the tweeters in this manner will help to set up a very solid soundstage.



SURFACE MOUNT

Surface Mounting

- Select mounting location. Mark wire hole and screw locations using the surface cup as a template.
- Drill holes for tweeter wires and mounting screws
- Using the supplied screws, attach the surface cup to surface
- Run tweeter wires through the hole and twist the tweeter into the cup
- Connect the tweeter wires to the supplied crossover



FLUSH MOUNT

ANGLE MOUNT

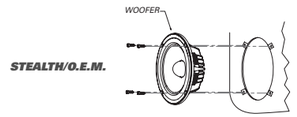
INSTALLATION KEY

Flush and Angle Mounting

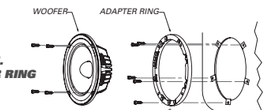
- Select mounting location and mark a 1-7/8" diameter hole with supplied template
- Cut out the 1-7/8" hole (a hole saw is recommended for metal and hard plastic surfaces; an X-acto knife for any other surface)
- Place the supplied bevel headed screws through the flush/angle cup and thread into the mounting clip, but do not tighten
- Take the assembled flush/angle cup and mounting clip and place them into the 1-7/8" diameter hole, making sure the mounting clip goes completely through the hole
- Tighten the screw in the base of the flush cup until the cup is completely tight
- Split tweeter wires and run through the holes and twist the tweeter into the cup

MIDRANGE MOUNTING

To get the best possible music reproduction, it is important to isolate the sound that is produced from the rear of the speaker from the sound that is produced from the front of the speaker. To isolate the front from the back wave, make sure the speaker is mounted in a baffle or plate, so that the back of the speaker is in a sealed chamber.

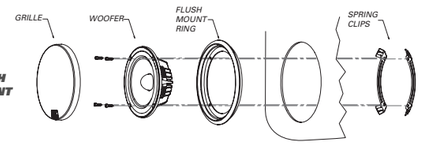


STEALTH/O.E.M.

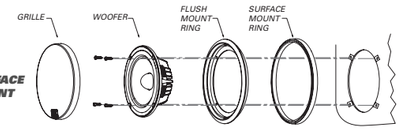


STEALTH/O.E.M. WITH ADAPTER RING

MOUNTING ADAPTER RING
Use the included mounting adapter ring to fit the TXC6.1 & TXC6.0 6½" speaker in ≤ 6½" mounting locations



FLUSH MOUNT



SURFACE MOUNT

Mounting

- Select the mounting location (door panels, rear side panels, rear deck, etc...)
- Using the supplied templates, mark the mounting holes on the door panel or rear deck
- Drill or cut the required holes as needed
- Install the units as illustrated in the diagrams

Note: The TXC6.1 and TXC6.0 are supplied with plastic mounting adapters. The adapters are used to convert the smaller basket sizes needed for European models to the larger domestic sizes. The plates will allow a tight and accurate fit, decreasing the need to fabricate adapters out of MDF or plastic.

For answers to further questions, please call 1-800-call-MTX

Three Way System

While the TXC sound quality is the best in the market, the addition of the TXC6.0 woofer can create an even better musical experience with more precise reproduction. The TXC6.0 has a separate cross-over, and the 2-way system can become a true 3-way system where it splits the lower frequencies between the original midrange and this additional woofer. This makes each speaker responsible for fewer frequencies and allows clearer, more accurate reproduction.

MTX BIGGEST BOLDEST BADDEST SOUND

MTX AUDIO

CROSSOVER MOUNTING

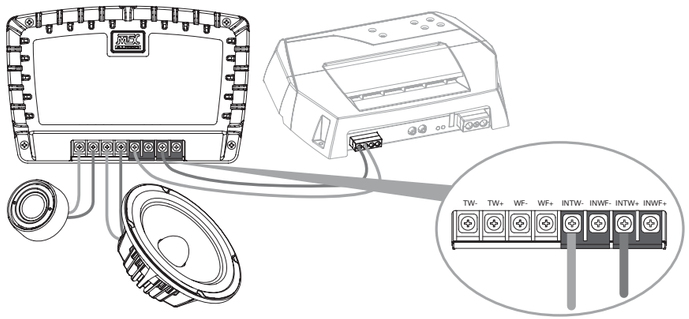
When choosing the mounting location of the crossover, accessibility is important. Adjustments to the on-/off-axis setting and tweeter attenuation are to be made after the components have been installed, so convenient positioning of the crossover is crucial. Also, the crossover has electronic components that must be mounted so it does not come in contact with moisture.

WIRING

When installing these separates consider the age of the factory wiring and gauge (size) of wire. If the vehicle is an older model or was pre-wired with small wire (18 gauge or less), running new high performance wire (http://www.streetwires.com/products/speakerCable/microUltraCable.cfm) will be necessary. The speaker wire should run from the amplifier's output terminals, under the carpet and through the factory rubber boot (loom) that protects the wires in the inner door jam. If the factory boot cannot be used, take other measures to protect these wires as best you can. Sometimes the door has to be completely removed to use the factory boot. If this is something that you do not feel comfortable doing, please ask a professional to help you. The wires should originate from the amplifier and attach to the crossover inputs.

CROSSOVER CONNECTIONS

Included with each TXC component system is a 2-way 18dB (tweeter)/12dB (midrange) octave separate crossover network. The crossover networks allow each driver within the component system to independently recreate frequencies within a precisely-designed range so that the speakers do not become distorted by trying to reproduce frequencies that they are not physically able to. This network ensures that the tweeter does not receive low bass notes and the mid-bass driver does not receive high frequencies. The 18dB (tweeter)/12dB (mid) octave design complements both the tweeter and mid and provides greater musical detail.



Note: Pay close attention to the markings on the crossover to be certain the correct speakers are in the correct outlet. If a tweeter is accidentally asked to play the frequencies reserved for a mid-bass driver, it will be damaged.

BI-AMP CONFIGURATION

These crossovers feature Bi-amp connections so that the components can be wired to drive the tweeter and midrange independently using two amplifiers. When using the components in the Bi-Amp configuration you are going to need two stereo amps or one four channel amp to run a pair of components. You will need to remove the Bi-amp jumpers from the input connection points of the crossover. Connect the desired amp or channels to the tweeter input. The second amplifier, or third and fourth channels of the 4-channel amplifier, will be connected to the woofer input on the crossover. When the crossover is set up in this configuration, the final load will be 4 ohms.

Note: It is important to make sure the gain of each amplifier is matched. Final gain level adjustments should be made using the crossover settings.

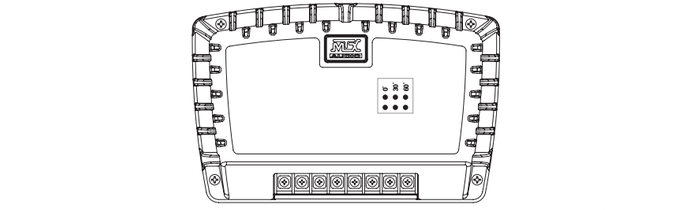
THREE LEVEL OFF-AXIS ADJUSTMENT

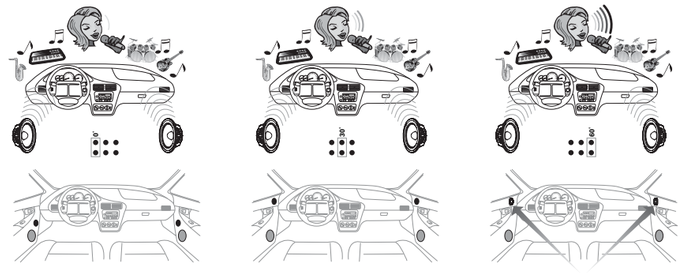
MTX designed the TXC components to compensate for undesirable factory mounting locations within the vehicles by including a three level on-/off-axis adjustment feature. Since you cannot move the factory speaker mounting locations within the vehicle, these adjustments will help to deliver sound that is clear, deep, and positioned like it is coming from directly in front of you. The music will have a sense of depth where it sounds like it is not confined by the windshield but rather coming from the road in front of you.

There are three settings on the crossover for Off-axis adjustments- 0˚, 30˚, and 60˚. These positions will compensate for the speaker placement and will use your vehicle's unique environment to create the best sounding system possible.

Note: For applications greater than 60˚, the 60˚ position setting is recommended

Once the speakers are installed in their final locations, do the "sit in the seat and close your eyes test." The vocals should be jump out at you, be cleanly defined, and move from side to side while the instrumentation should be full and distinct layers. If you don't hear your music in this fashion, select a different jumper position and repeat the "sit in the seat and close your eyes test" (The jumper settings listed below are our recommended starting points). Take time to listen to the components in each of the jumper settings in detail to determine which sound is best for your application.



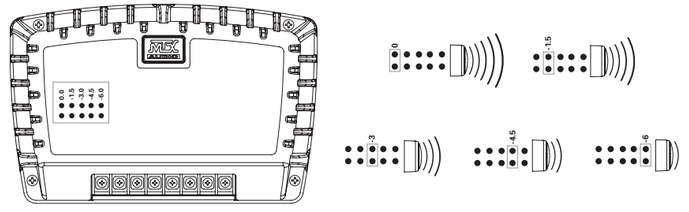


TWEETER MOUNTED LOW ***TWEETER FLUSH MOUNTED*** ***TWEETER ANGLED TOWARD LISTENER***

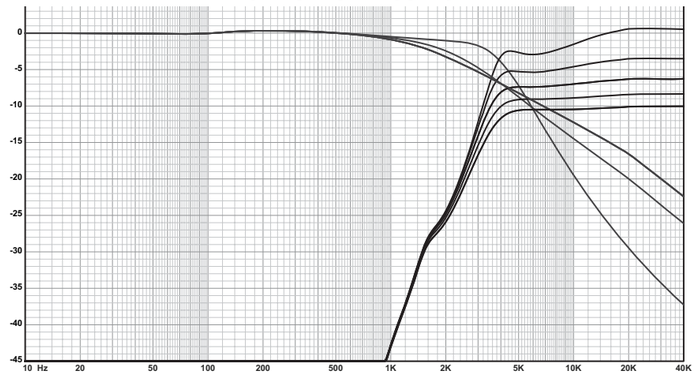
TWEETER ATTENUATION ADJUSTMENT

When setting the attenuation of your tweeter, you are going to want to adjust this level by the distance from tweeter to listener as well as personal preferences. The attenuation has five levels that range from 0dB to –6dB. Generally, this would be set up with 0dB being further away, and –6dB being closer, to the listener's ear. If you have the attenuation set at 0dB and the speakers seem too bright, adjust the jumper downward until it matches your personal taste. If the speakers seem too dim or quiet, adjust the tweeter upward.

Note: The tweeter adjustments will also dramatically affect the balance between your tweeter and the 0, 30, and 60 degree setting of your midrange. After setting the tweeter to a comfortable level, you may need to readjust your midrange off-axis adjustment to achieve the optimum balance.



VOLTAGE VS. FREQUENCY



WARRANTY STATEMENT

MTX Audio Thunder Axe High-End Components purchased in the United States from an authorized MTX Audio dealer are guaranteed against defects in material and workmanship for a period of ONE YEAR from the date purchased by the end user, and limited to the original retail purchaser of the product. Product found to be defective during that period will be repaired or replaced by MTX Audio at no charge. This warranty is void if it is determined that unauthorized parties have attempted repairs or alterations of any nature. Warranty does not extend to cosmetics or finish. Before presuming a defect is present in the product, be certain that all related equipment and wiring is functioning properly. MTX Audio disclaims any liability for other incurred damages resulting from product defects. Any expenses incurred in the removal and reinstallation of products are not covered by this warranty. MTX Audio's total liability will not exceed the purchase price of the product. If a defect is present, your authorized MTX Audio dealer may be able to effect repairs. Proof of purchase is required when requesting service. Please retain your sales receipt and take a moment to register your product on line at mtx.com.

© 2005 MTX. All rights reserved. MTX, Thunder, Axe and StreetWires are trademarks of Mitek.
Designed and Engineered in the U.S.A.
Due to continual product development, all specifications are subject to change without notice.
MTX Audio, 1 Mitek Plaza, Winslow, IL 61089 U.S.A. MTX002043 RevA 3/05 21A7846

MTX BIGGEST BOLDEST BADDEST SOUND

MTX AUDIO